

## OPHTHALMOLOGY

UNDER THE CHARGE OF  
EDWARD JACKSON, A.M., M.D.,  
DENVER, COLORADO,  
AND  
T. B. SCHNEIDEMAN, A.M., M.D.,  
PHILADELPHIA.

**Detachment of Retina in Toxemia of Pregnancy.**—CLAPP (*Am. Jour. Ophthalm.*, July, 1919, p. 473) has examined the eyes of practically all of the albuminuria and toxemia cases occurring in the past fourteen years at the Maryland Lying-in Hospital, and has not observed detachment of the retina until recently. Six cases have presented themselves since December, 1917, whose histories are briefly detailed. They varied in extent from small to almost complete detachment of the retina, in contradistinction to so-called idiopathic detachments, these have all subsided and become reattached with normal fields of vision. They may be antepartum or postpartum, and may clear up in a few hours, and are frequently far forward in the periphery and found only after some searching. They are probably present much more frequently than heretofore recorded and the prognosis is good so far as the detachment is concerned.

**The Eye of Birds.**—ROCHON-DUVIGNEAUD (*Annal. d'oculist.*, June, 1919, p. 376) gives a résumé of the anatomy of the eye of birds. There are two types of eyes in birds: that of the diurnal with small cornea and large posterior segment, and that of the nocturnal with large cornea (and large crystalline) and relatively small posterior segment. The eye of diving birds presents certain peculiarities at the sclero-corneal limbus: a kind of circular dilatation entirely surrounding the cornea. The crystalline of birds shows as its most important peculiarity an annular collar, the greater or less development of which according to different species modifies the form and consequently the refraction of the lens. The vitreous of birds is very consistent, which coupled with the bony scleral ring and the cartilaginous plate lining the entire sclerotic results in the posterior segment being very resistant, so that it is little or not at all affected by modifications of tension: the latter involves only the anterior chamber, very deep in the diurnal, still deeper in the nocturnal; the aqueous humor accordingly plays the essential part in the physiological maintenance and modifications of the intra-ocular tension. The pecten is nothing but a vascular membrane derived from the optic nerve, of which it represents the capillary network as a forward extension. It is an organ of nutrition to compensate the complete avascularity of the bird's retina; it has nothing to do with the accommodation. It is relegated to the postero-inferior segment of the eye, below and behind the foveal region so as not to interfere with the function of the latter. It is smaller in the nocturnal, probably because

the retina of these birds is relatively smaller than that of the diurnal. The ciliary muscle consists of three systems of striated fibers, the mechanism of which is incomprehensible with present theories of accommodation. The raptorial, eagle, hawk, etc., possess actually two foveæ, one central, the other further back (fovea lateralis). The central fovea is the principal one; its cellular layers (particularly the bipolar cells) are richer in elements. The posterior fovea is, however, well marked as a fovea: it is more or less developed according to the species. The eye of the eagle presents no difference, compared with that of other diurnal raptorial except perhaps greater thickness of the osseous scleral plaques. Its axis is 27 mm. long with a maximum width of 32 mm.: it is accordingly larger and longer than the human eye; the retinal images of the eagle are therefore much larger than those of man—a circumstance favorable for visual acuity independent of all special function of the retina.

---

## PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF

OSKAR KLOTZ, M.D., C.M.,

PROFESSOR OF PATHOLOGY AND BACTERIOLOGY, UNIVERSITY OF PITTSBURGH,  
PITTSBURGH, PA.

---

**The Occurrence of *Bacillus Influenzæ* in the Normal Throat.**—During the epidemic of influenza in October, 1918, PRITCHETT and STILLMAN found this organism present in 42 per cent. of 177 healthy individuals from whom no history or respiratory infection was obtainable. These observers found the same organism in the throats of convalescents from influenza in 46 per cent. of individuals studied. In the same epidemic period Lord, Scott and Nye demonstrated *B. influenza* in the pharyngeal secretions of 76 per cent. of 34 healthy men of the Harvard S. A. T. C. Opie and his collaborators found *B. influenza* in the mouths of 35.1 per cent. of all healthy men examined at Camp Funston. These figures indicate the wide distribution and prevalence of the organism during the severe epidemic of this acute respiratory disease. The authors (*Jour. Exper. Med.*, 1919, xxx, 497) made a study of the personnel of the Rockefeller Institute. Following up the examinations reported in their previous paper they have been able to make repeated cultural examinations of the throats of 84 of the same persons during a period of six months. The present study indicates that the percentage incidence of those harboring *B. influenza* in the upper respiratory tract is as great during the post-epidemic period as it was during the influenza epidemic. From December, 1918, to June, 1919, the percentage of carriers in a group of 150 individuals has averaged 41 per cent. per month. This percentage incidence of healthy persons found to harbor influenza bacilli in their throats and saliva is approximately the same as that recorded by Pritchett and Stillman during the height of the epidemic. In addition it is of interest that in a boys' orphan asylum in which no case of influenza had occurred during